

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER REQUIRING THE CITY AND COUNTY OF  
SAN FRANCISCO, SAN FRANCISCO INTERNATIONAL  
AIRPORT TO CEASE AND DESIST DISCHARGING  
WASTES FROM THE INDUSTRIAL WASTE AND  
STORMWATER DRAINAGE SYSTEM INTO SAN FRANCISCO  
BAY CONTRARY TO REQUIREMENTS PRESCRIBED BY  
THE CALIFORNIA REGIONAL WATER QUALITY  
CONTROL BOARD

ORDER NO. 77-34

The California Regional Water Quality Control Board, San Francisco Bay Region finds that:

- A. On September 19, 1963, this Board adopted Resolution No. 499 prescribing requirements for storm water and industrial wastes discharged from the airport drainage pumping stations numbers 1, 2, and 4 into San Francisco Bay by the City and County of San Francisco, San Francisco International Airport, hereinafter, referred to as the discharger.
- B. On August 19, 1965, this Regional Board adopted Resolution No. 692, prescribing requirements for the storm water and industrial waste discharge from airport drainage pumping station number 2 into San Francisco Bay by the discharger.
- C. On June 26, 1973, this Regional Board adopted Order No. 73-37 ordering the discharger to cease and desist from discharging or threatening to discharge wastes which violate requirements of Resolution Nos. 499 and 692 by August 26, 1973.
- D. On November 18, 1975, this Regional Board adopted a National Pollutant Discharge Elimination System (NPDES) Permit, Order No. 75-76, which contained a time schedule for construction of an industrial waste sewer system and treatment plant to achieve compliance with requirements.
- E. On March 15, 1977, this Regional Board adopted Order No. 77-25 which amended the NPDES Permit.
- F. The amended NPDES Permit requirements provide, in part, as follows:
  - A. Discharge Prohibitions
    - 1. "The discharge at any point at which the wastewater does not receive an initial dilution of a least 10:1 is prohibited. Exceptions shall be made for stormwater runoff in excess of the capacity of treatment facilities. Effluent limits shall apply to all wastes regardless of degree of treatment or point of discharge."

2. "There shall be no bypass or overflow of untreated wastewater to waters of the State either at the treatment facilities or from the collection system. Exceptions shall be made for stormwater runoff in excess of the capacity of treatment facilities. Effluent limits shall apply to all wastes regardless of degree of treatment or point of discharge."

"B. Effluent Limitations

1. Waste discharges 001 and 002 shall not in combination contain constituents in excess of the following:

<u>Constituent</u>	<u>Units</u>	<u>30-Day Average</u>	<u>Maximum Daily</u>
COD	lbs/day	2090	4170
	kg/day	950	1900
	mg/l	125	250
BOD <sub>5</sub>	lbs/day	420	830
	kg/day	190	380
	mg/l	25	50
Total Suspended Solids	lbs/day	420	830
	kg/day	190	380
	mg/l	25	50
Settleable Solids	ml/l-hr	0.20	0.50
Oil & Grease	lbs/day	170	250
	kg/day	76	110
	mg/l	10	15
Cadmium	lbs/day	1.7	3.3
	kg/day	0.76	1.5
	mg/l	0.10	0.20
Total Chromium	lbs/day	5.0	10
	kg/day	2.3	4.5
	mg/l	0.30	0.60
Copper	lbs/day	3.3	6.7
	kg/day	1.5	3.0
	mg/l	0.20	0.40
Lead	lbs/day	1.7	3.3
	kg/day	0.76	1.5
	mg/l	0.1	0.2
Mercury	lbs/day	0.017	0.033
	kg/day	0.0077	0.015
	mg/l	0.001	0.002

<u>Constituent</u>	<u>Units</u>	<u>30-Day Average</u>	<u>Maximum Daily</u>
Nickel	lbs/day	17	33
	kg/day	7.6	15
	mg/l	1.0	2.0
Zinc	lbs/day	8.3	17
	kg/day	3.8	7.6
	mg/l	0.5	1.0
Cyanide	lbs/day	1.7	3.3
	kg/day	0.76	1.5
	mg/l	0.1	0.2
Phenolic Compounds	lbs/day	1.7	3.3
	kg/day	0.76	1.5
	mg/l	0.5	1.0

2. The discharge shall not have a pH of less than 6.0 nor greater than 9.0."
3. "The wastes as discharged shall meet the following limits for toxicity:
  - a) For wastes receiving an initial dilution of at least 10:1, the survival of test fishes in 96-hour bioassays of the effluent shall be a 90 percentile value of not less than 50 percent survival.
  - b) For wastes not receiving an initial dilution of at least 10:1, the survival of test fishes in 96-hour bioassays of the effluent shall be a median of 90 percent survival and a 90 percentile value of not less than 70 percent survival."
- "4. The effluent shall not have a chlorine residual greater than 0.0 mg/l.

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#### C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.

- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
- a. Dissolved oxygen                      5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
  - b. Dissolved sulfide                      0.1 mg/l maximum.
  - c. pH    Variation from natural ambient pH by more than 0.2 pH units.
  - d. Un-ionized ammonia                      0.025 mg/l, Annual median  
as N    0.4 mg/l, Maximum
  - e. Total coliform                              240 MPN/100 ml median of five consecutive samples, maximum. 10,000 MPN/100 ml, any single sample, maximum, when verified by a repeat sample taken within 48 hours.

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#### D. Provisions

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4. The discharger shall comply with the following time schedule to assure compliance with Sections A., B., and C. of this Order:

<u>Task</u>	<u>Completion Date</u>	<u>Report of Compliance Due</u>
Develop conceptual plan	Feb. 1, 1976	Feb. 15, 1976
Complete final design and construction plans	June 1, 1976	June 15, 1976
Submit status report	Jan. 1, 1977	Jan. 15, 1977
Full compliance	July 1, 1977	July 15, 1977

The discharger shall submit a report to the Board on or before each compliance report date, detailing his compliance or non-compliance with the specific schedule date and task. If non-compliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the discharger will be in compliance. The discharger shall notify the board by letter when he has returned to compliance with the time schedule.

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7. "The requirements prescribed by this Order amend the requirements prescribed by Resolution No. 499 and Resolution No. 692, adopted by the Board on September 19, 1963, and August 19, 1965, respectively, and are effective on the dates indicated in the above time schedule, PROVIDED HOWEVER that the following requirements prescribed in Resolution No. 499 and Resolution No. 692 shall remain in effect and be in addition to the requirements prescribed in this Order until Resolution No. 602 (Order to Cease and Desist) as amended by Resolution No. 767 and Cease and Desist Order No. 73-37 are rescinded by this Board:

- 'A. FOR THE PREVENTION OF NUISANCE  
The discharges shall not cause:

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3. Turbidity or discoloration in waters of the State at any place;

B. FOR THE PROTECTION OF BENEFICIAL WATER USES

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2. The quality of the waste as determined at each discharge shall be maintained within the following limits:

a. Any 6-hour composite sample made up of portions collected at hourly intervals in proportion to rate of flow at time of collection:

Toxicity to fish - A 96-hour bioassay of the undiluted waste on fish yields the following results:

Survival of Test Fish - 90% minimum

Chromium	2.0 mg/l maximum
Cadmium	1.0 mg/l maximum
Copper	0.26 mg/l maximum
Zinc	1.0 mg/l maximum
Silver	1.0 mg/l maximum
Lead	0.1 mg/l maximum
Cyanide	1.0 mg/l maximum
Phenolic Compounds	0.5 mg/l maximum
Grease	20 mg/l maximum
Settleable Matter	*0.5 ml/l-hr
ph	6.5 minimum to 8.5 maximum

b. Any grab sample:

Settleable Matter \*1.0 ml/l-hr;

\*At all times that the discharge does not contain storm runoff water.

C. FOR THE PREVENTION OF HAZARDS TO PUBLIC HEALTH

The waste shall not contain sewage at any time;" "

G. Inspection by Regional Board staff and reports from the discharger and his representatives indicate that the discharger is violating or threatening to violate the requirements listed in Finding F above.

H. Regional Board staff met with the discharger's staff and representatives on August 11, 1976 and December 23, 1976, discussed the violation and threatened violation of requirements and requested immediate action to eliminate such violation and threatened violation.

- I. On April 12, 1977, at a meeting starting at 9:00 a.m. in the Assembly Room, State Building, 1111 Jackson Street, Oakland, after due notice to the discharger and all other affected persons, a Hearing Panel of the Regional Board conducted a public hearing at which the discharger appeared and evidence was received concerning the discharge.
- J. Upon the basis of the evidence received, the Hearing Panel recommended that the Regional Board issue a cease and desist order against the discharger requiring that he comply with the aforesaid requirements in accord with a time schedule. The Board has independently reviewed the record.
- K. The discharger violated or is threatening to violate requirements listed in Finding F of this Order.
- L. Any increase in the discharge of waste will increase the violation or likelihood of violation of waste discharge requirements and will further unreasonably impair water quality.

IT IS HEREBY ORDERED THAT:

- A. The discharger cease and desist from discharging wastes contrary to requirements listed in Finding F of this Order.
- B. The discharger shall comply with Board Orders Nos. 75-76 and 77-25 for receiving water limitation C.1.d. according to the following time schedule:

<u>Task</u>	<u>Completion Date</u>
Complete construction of facilities necessary to prevent pond discharge from causing violation	by June 12, 1977
Complete construction of facilities necessary to prevent bypass discharge from causing violation	by September 1, 1977

- C. The discharger shall comply with the Board Order Nos. 75-76 and 77-25 for discharge prohibition A.1. and A.2.; effluent limitations B.1., B.2., B.3., and B.4.; receiving water limitations C.1.a., C.1.b., C.1.c., C.1.e., and C.2.; provision D.4. according to the following time schedule:

<u>Task</u>	<u>Completion Date</u>
(1) <u>Collection and Transmission System</u>	
Complete design and advertise for construction of total system except the pump station at the North Pond and the force main between the pump station and proposed treatment plant (Phase I construction)	by May 17, 1977

<u>Task</u>	<u>Completion Date</u>
Mayor and Board of Supervisors adopt budget to provide for fiscal year 77-78 construction	by July 1, 1977
Airports Commission document availability of funds to finance construction of the total system	by July 1, 1977
Begin Phase I construction	by July 15, 1977
Complete design and advertise for construction of the remainder of the total system (Phase II construction)	by June 21, 1977
Begin Phase II construction	by August 21, 1977
Complete all construction	by July 1, 1978

(2) Treatment Plant

Airports Commission shall by resolution or other action formally declare:	
• type of treatment plant to be constructed; and	
• plan for financing which includes a commitment by which all needed funds will be made available to commence construction by April 15, 1978	by May 17, 1977
Contract or employ engineers to design plant	by May 17, 1977
Begin design of plant	by June 1, 1977
Complete final design and advertise for construction	by March 1, 1978
Begin construction	by April 15, 1978
Complete construction of plant	by September 15, 1979

- D. Additional discharges to the sewer system by dischargers who did not discharge into the system prior to April 12, 1977, are prohibited; provided the following are excluded from this provision: (a) projects under construction or which were issued building permits before April 12, 1977, (b) projects which would eliminate discharges from existing dwellings which have waste disposal systems causing more severe water quality problems than those caused by the community sewer system, or (c) projects which would alleviate an extreme public hardship or a public health problem. Exclusions pursuant to (b) and (c) shall be obtained by application to and approval of the Executive Officer.
- E. The discharger shall provide a detailed report by May 15, 1977 of a procedure that is acceptable to the Executive Officer for controlling discharges to assure compliance with the above provision on prohibition against additional discharges to the sewer system by dischargers who did not discharge into the system prior to April 12, 1977.

- F. The discharger is required to provide to the Board by May 15, 1977, and monthly thereafter, a report, under penalty of perjury, on progress toward compliance with the provisions of this Order.
- G. If the Executive Officer finds that the discharger has failed to comply with the provisions of this Order, he is authorized after approval of the Board Chairman, to request the Attorney General to take the appropriate enforcement action against the discharger, including injunction and civil monetary remedies, if appropriate.

If the Executive Officer determines that the provisions of this Order are violated and does not refer the matter to the Attorney General, he is instructed to report to the Board the reasons that the discharger has been unable to comply with the provisions of this Order.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 19, 1977.

FRED H. DIERKER  
Executive Officer